CITY OF ALAMEDA INTEGRATED PEST MANAGEMENT POLICY
(Adopted by City Council Resolution: 6/15/10)

I. PURPOSE

This City Policy sets forth the guiding principles for development and implementation of Integrated Pest Management (IPM) practices on all City properties.

II. OBJECTIVES

A. Reduce or minimize pesticide use on municipally owned buildings and landscaping (City Properties) to ensure the City is in compliance with its municipal stormwater National Pollutant Discharge Elimination System (NPDES) permit requirements.

B. Establish the use of Integrated Pest Management in all municipal operations and on all City Properties.

C. Minimize the reliance on pesticides that threaten water quality.

D. Create awareness among City staff of less-toxic pest management techniques.

E. Educate City departments to practice the most appropriate approach to managing pests, including prevention, on City properties.

F. Reduce the adverse impacts to San Francisco Bay water quality due to pesticide usage, particularly from organophosphorous pesticides (chlorpyrifos, diazinon, and malathion), pyrethroids (bifenthrin, cyfluthrin, beta-cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambda-cyhalothrin, permethrin, and tralomethrin), carbamates (e.g., carbaryl), fipronil and copper-based pesticides.

III. ORGANIZATIONS AFFECTED

A. Public Works Department
B. Recreation and Parks Department
C. Golf Complex
D. Alameda Municipal Power
E. Economic Development Department

IV. POLICY

It is the policy of the City of Alameda to:
A. Comply with Federal requirements for local government to develop and implement an Integrated Pest Management policy or ordinance to address water quality impairment by pesticides, per Section C.9.a. of the Municipal Regional Stormwater NPDES Permit, Order No. R2-2009-0074, from the California Regional Water Quality Control Board, 10/14/09.

B. Adopt and implement a policy requiring the use of Integrated Pest Management techniques in the City's operations, as required for all co-permittees of the Alameda Countywide Clean Water Program.

C. Establish City departmental written standard operating procedures for pesticide use that ensure implementation of the IPM policy and require municipal employees and contractors working on City property to adhere to IPM standard operating procedures.

D. Support the City of Alameda Municipal Code, Storm Water Management and Discharge Control ordinance, Ordinance No. 2605, by describing procedures by which the City may implement its policy regarding urban runoff.

This City Policy shall not be construed as requiring a department, purchaser or contractor to procure products that do not perform adequately for their intended use, exclude adequate competition, risk the health or safety of workers and citizens, or are not available at a reasonable price in a reasonable period of time.

This City Policy shall not be construed as requiring the City of Alameda, a department, purchaser or contractor to take any action that conflicts with local, state or federal requirements.

V. DEFINITIONS

5.1 *Biological control* - The use of biological technologies to manage unwanted pests. Examples of this type of control include, but are not limited to, the use of pheromone traps or beneficial insect release for control of certain types of weeds or invasive insects in landscapes.

5.2 *Cultural control* - The use of IPM control methods such as grazing, re-vegetation, disking, mulching, proper irrigation, seeding, and landscaping with competitive or tolerant species to manage unwanted weeds, rodents or plant diseases, plus good housekeeping.

5.3 *DPR* - Department of Pesticide Regulations for the State of California's Environmental Protection Agency. DPR, in partnership with the Federal Environmental Protection Agency (EPA) and the County Department of Agriculture, oversees all issues regarding the registration, licensing and enforcement of laws and regulations pertaining to pesticides.

5.4 *Integrated Pest Management (IPM)* - IPM is the strategic approach that focuses on long-term prevention of pests and their damage from reaching unacceptable levels by selecting and applying the most appropriate combination of available pest control methods. These include cultural, mechanical, biological and chemical technologies that are implemented for a given site and pest situation in ways that minimize economic, health and environmental risks.

5.5 *Mechanical controls* - The use of IPM control methods utilizing hand labor or equipment such as mowers, graders, weed-eaters, and chainsaws. Crack and crevice sealants and closing small entryways (i.e., around pipes and conduits) into buildings for insect and rodent management are also mechanical controls.

5.6 *PCA* - Pest Control Advisor is one licensed by the California Department of Pesticide Regulations according to Title 3, Article 5 of the California Code of Regulations. A licensed PCA, who is registered with the County Agricultural Commissioner, provides written pest control recommendations for agricultural pest management, including parks, cemeteries, and rights-of-way.

5.7 *Pesticides* - Defined in Section 12753 of the California Food and Agricultural Code as any spray adjuvant, or any substance, or mixture of substances intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest, as defined in Section 12754.5 (of the Food and Agricultural Code), which may infest or be detrimental to vegetation, man, animals or households, or be present in any agricultural or nonagricultural environment whatsoever. The term pesticide applies to herbicides, insecticides,

fungicides, rodenticides and other substances used to control pests. Antimicrobial agents are not included in this definition of pesticides

5.8 *QAL* - Qualified Applicator License is a licensed applicator according to Title 3, Article 3 of the California Code of Regulations. This license allows supervision of applications that may include residential, industrial, institutional, landscape, or rights-of-way sites.

5.9 *QAC* - Qualified Applicator Certificate is a certified applicator of pesticides according to Title 3, Article 3 of the California Code of Regulations. This certificate allows supervision of applications that may include residential, industrial, landscape, or rights-of-way sites.

5.10 *Structural Pest Control Operator (SPCO- Branch I, II or III)* - A licensed applicator for controlling pests that invade buildings and homes according to the requirements of the Structural Pest Control Board of the California Department of Consumer Affairs.

VI. RESPONSIBILITY

6.1 Coordination

6.1.1 This Policy applies to the City Departments with operations subject to this Administrative Regulation. Department Directors, or their designees, shall coordinate implementation of this Administrative Regulation.

6.2 Training

6.2.1 All City employees who within the scope of their duties apply or use pesticides that threaten water quality shall be trained in IPM practices, the City's IPM policy, department IPM standard operating procedures, and as required by State of California Department of Pesticide Regulations rules, the County Agricultural Commissioner, and/or the Structural Pest Control Board and the City's NPDES permit. Training opportunities may also include the Bay-Friendly Landscape Maintenance Training and Qualifications Program and EcoWise Certified. Each Department will maintain records of all training activities (e.g., attendees, course outline, date).

6.2.2 City Staff responsible for pest management on City property will ensure annual training is provided to all employees who within the scope of their duties apply pesticides on:

1. Pesticide Safety,
2. This City Policy on IPM and
3. City department IPM standard operating procedures, appropriate Best Management Practices and Integrated Pest Management Technologies.

6.2.3 Pest Control Advisors and Applicators, pest management contractors, and other "contract for service providers" serving City properties will be licensed by the State of California Department of Pesticide Regulations (DPR) as a Pest Control Advisor or licensed Qualified Applicator and either IPM-certified or under contract to implement IPM. Contract specifications shall require contractors to implement IPM no later than July 1, 2010.

6.3 Public Education and Outreach

6.3.1 The City's Clean Water Program, in participation with the Alameda Countywide Clean Water Program, will continue with its existing program to encourage people who live, work, and/or attend school in Alameda to:

1. Obtain information on IPM techniques to control pests and minimize pesticide use
2. Use IPM technologies for dealing with pest problems

3. Perform pesticide applications according to the manufacturer's instructions as detailed on the product label, and in accordance with all applicable state and local laws and regulations set forth to protect the environment, the public, and the applicator; and properly dispose of unused pesticides and their containers.

6.3.2 City of Alameda Departments with property leaseholders shall inform property leaseholders of the need to comply with the City Policy on IPM and encourage the use of the most current IPM technologies and Best Management Practices.

6.4 Program Evaluation
6.4.1 Each Department with operations subject to this City Policy shall monitor and evaluate its success implementing this City Policy. This evaluation can include progress in meeting the objectives of this City Policy, and note barriers encountered, recommendations for resolution, cost analysis, and a description of assistance needed to continuously improve staff's ability to meet the City Policy objectives.

6.5 Reporting Requirements
The information outlined below is required for inclusion in the City's NPDES Stormwater Permit Annual Report compiled by the City's Clean Water Program for submittal to the Regional Water Quality Control Board. Each City department, pest management contractor, and/or other appropriately licensed contractors employed by the City to provide city services that involve pesticide application on City properties shall submit by **July 15th** annually to the Public Works Clean Water Program staff:

A. Annual Pesticide Use Summary Report

1. Product name and manufacturer
2. Active ingredient
3. The total quantity of each pesticide used during the prior fiscal year (from July 1 to June 30) in order to provide an accounting of pesticide use at City-owned or operated properties.
4. Target pest(s) for pesticide application(s).
5. Reasons for increases in use of pesticides that threaten water quality, specifically organophosphorous pesticides, pyrethroids, carbaryl, fipronil, and copper-based pesticides.

Annual Pesticide Use Summary Report Forms may be obtained by contacting the Public Works Clean Water Program staff.

B. Annual Training Summary (City departments only)

1. The number of departmental employees who apply pesticides.
2. The number of departmental employees who apply pesticides who have received training in IPM policy and IPM standard operating procedures during the reporting year.

VII. PROCEDURE

7.1 Pesticide Prevention
7.1.1 The City of Alameda shall institute practices that reduce the use of pesticides and result in the purchase of fewer pesticides whenever practicable and cost-effective, but without reducing safety or workplace quality.

7.1.2 The City of Alameda shall direct all employees to implement Good Housekeeping Practices in their workstations, vehicles, break rooms, outdoor work areas, etc., to prevent the conditions that provide a food source and habitat which attract unwanted pests

7.2 Pest Control and Management

7.2.1 The City of Alameda, including all departments and staff herein, and contractors or individuals (QAL, QAC, SPCO) providing pest control services on City property (Applicators) shall follow the City's Integrated Pest Management City Policy and utilize generally accepted IPM Best Management Practices (BMPs) to the maximum extent practicable for the control or management of pests in and around City buildings and facilities, parks and golf courses, urban landscape areas, rights-of-way, and other City properties.

7.2.2 Applicators will use the most current IPM technologies available to ensure the long-term prevention or suppression of pest problems and to minimize negative impacts on the environment, non-target organisms, and human health.

7.2.3 Applicators will consider the options or alternatives listed below in the following order, before recommending the use of or applying any pesticide on City property:

1. No controls (e.g., tolerating the pest infestation, use of resistant plant varieties or allowing normal life cycle of weeds)
2. Physical or mechanical controls (e.g., hand labor, mowing, exclusion)
3. Cultural controls (e.g., mulching, disking, alternative vegetation), good housekeeping (e.g. cleaning desk area)
4. Biological controls (e.g., natural enemies or predators)
5. Reduced-risk chemical controls (e.g., soaps or oils)
6. Other chemical controls

7.3 Pesticide Application

7.3.1 Only City of Alameda employees or appropriate licensed contractors employed by the City who are authorized and trained in pesticide application (i.e., hold PCA, QAL, QAC, or Structural Branch Operator I, II, or III certifications/licenses or individuals working under the supervision of one of the aforementioned certificate/license holders) and who shall implement the City department's IPM standard operating procedures may apply pesticides to or within City property.

7.3.2 City of Alameda employees are not to apply pesticides during municipal operations or on City property that have been purchased at City employee expense. Each City department shall assign a responsible supervisor to identify less-toxic products to be used. If there are no less-toxic products on hand, department employees shall contact the assigned supervisor to be given approved less-toxic pesticides (i.e. Orange Guard, insecticidal soap).

7.3.3 Applicators will select and apply IPM methods that will minimize reliance on pesticides that threaten water quality, human health and the environment.

7.3.4 Existing contracts and New contracts that are entered into with pest management contractors and other appropriately licensed contractors employed to provide services that involve pesticide application at City properties after **June 30, 2010** will include requirements that the contractors follow the requirements of this City Policy on IPM and implement the most current IPM technologies and Best Management Practices.

7.4 Restricted Chemicals

7.4.1 City of Alameda employees and/or contractors employed by the City who are trained to recommend or apply pesticides will not use or promote the use of:

1. Acute Toxicity Category I chemicals as identified by the Environmental Protection Agency (EPA),

2. Organophosphate pesticides (e.g., those containing Diazinon, chlorpyrifos or malathion)
3. Pyrethroids (bifenthrin, cyfluthrin, beta-cyfluthrin, cypermethrin, deltamethrin, esfenvalerate, lambda-cyhalothrin, permethrin, and tralomethrin), carbamates (e.g., carbaryl), fipronil
4. Copper-based pesticides unless:
    a. Their use is judicious,
    b. Other approaches and techniques have been considered, and;
    c. Threat of impact to water-quality is prevented.

7.4.2 Applicators will always avoid applications of pesticides that directly contact water, unless the pesticide is registered under Federal and California law for aquatic use.

7.4.3 Pesticides that are not approved for aquatic use will not be applied to areas immediately adjacent to water bodies where through drift, drainage, or erosion, there is a reasonable possibility of a pesticide being transported into surface water.

7.4.4 Discharges of pollutants from the use of aquatic pesticides to the waters of the United States require coverage under a NPDES permit. Those City employees or appropriately licensed contractors employed by the City who apply pesticides directly to waters of the United States will obtain a NPDES permit from the California State Water Quality Resources Control Board Region 2, prior to making any pesticide applications.

7.5 Best Management Practices (BMPs)
7.5.1 This section includes additional BMPs and control measures not discussed above to protect water quality. These BMPs were previously incorporated into the City of Alameda's Best Management Practices for Pesticides, Herbicides and Fertilizers Usage, utilized by Public Works, Recreation & Parks, Housing Authority and the Golf Complex. An IPM process assists in the determination of whether or not a pesticide application is necessary.
1. Follow all federal, state, and local laws and regulations governing the use, storage, and disposal of pesticides and training of pest control advisors and applicators.
2. Use the most effective, least toxic pesticides that will do the job, provided there is a choice. The agency will take into consideration the LD_{50}, overall risk to the applicator, and impact to the environment (chronic and acute effects).
3. Apply pesticides at the appropriate time to maximize their effectiveness and minimize the likelihood of discharging pesticides in stormwater runoff. Avoid application of pesticides if rain is expected (this does not apply to the use of pre- emergent herbicide applications when required by the label for optimal results.)
4. Employ techniques to minimize off-target application (i.e. spray drift) of pesticides, including consideration of alternative application techniques. For example, when spraying is required, increase drop size, lower application pressure, use surfactants and adjuvants, use wick application, etc.
5. Apply pesticides only when wind speeds are low.
6. Mix and apply only as much material as is necessary for treatment. Calibrate application equipment prior to and during use to ensure desired application rate.

7. Do not mix or load pesticides in application equipment adjacent to a storm drain inlet, culvert, or watercourse.
8. Properly inspect applicator equipment to prevent accidental pesticide leaks, spills and hazards to applicators and the environment.

9. Meet local fire department and Alameda County Agricultural Commissioner storage requirements for pesticide products. Provide secondary containment for liquids if required.
10. Prepare spill kits, store the kits near pesticides, and train employees to use them.
11. Store pesticides and other chemicals indoors in a locked and posted storage unit, as per California Code of Regulations.
12. Store pesticides in labeled containers, as per California Code of Regulations.
13. Rinse empty pesticide/herbicide containers, and empty in the spray, as per California Code of Regulations.
14. Dispose of triple-rinsed empty pesticide containers according to recommendations of the Alameda County Agricultural Commissioner and the manufacturer.
15. Try to find a qualified user for any unwanted pesticides, or return to the manufacturer if unopened. If disposal is required, contact Alameda County's Household Hazard Waste Collection Program at (510) 670-6460 between 8:30 AM and 5:00 PM., Monday through Friday, to make appropriate disposal arrangements, or to recycle the material.
16. If changing pesticides or cleaning spray tanks, use tank rinse water as the product, over a targeted area within the application site.
17. Irrigate slowly to prevent runoff, and do not over-water.

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